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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,723	09/09/2003	Thomas J. Sabourin	133282UL (MHM-14768US01)	2790
23446 7590 12/28/2006 MCANDREWS HELD & MALLOY, LTD 500 WEST MADISON STREET SUITE 3400 CHICAGO, IL 60661			EXAMINER PATEL, KANJIBHAI B	
			ART UNIT	PAPER NUMBER
			2624	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		12/28/2006	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/658,723

Applicant(s)

SABOURIN ET AL.

Examiner

Kanji Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 and 20 is/are rejected.
- 7) ☒ Claim(s) 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 July 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. Drawings filed 7/29/05 have been approved by the examiner.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2, 4-18 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Simpson et al. (US 6,676,606 B2).

For claim 1, Simpson et al. disclose a method for generating images using an ultrasound apparatus (Figure 1) comprising:

storing (32) at least one frame (column 2, lines 29-33);

generating at least one image output from said at least one frame (column 2, lines 26-33); and

displaying (40) at least said generated image output (column 2, lines 26-29).

For claim 2, Simpson et al. disclose the method of claim 1 comprising storing a plurality of frames (column 2, lines 29-33).

For claim 3, Simpson et al. disclose the method of claim 2 wherein at least two frames of said plurality of frames are acquired at different geometries (image

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registration 35 is used to register images of different orientation providing different geometries).

For claim 4, Simpson et al. disclose the method of claim 2 wherein a less compounded image output is generated from less than all of said plurality of frames (column 2, lines 26-28).

For claim 5, Simpson et al. disclose the method of claim 1, wherein generating said at least one image output comprises generating a compounded image (column 2, lines 26-28).

For claim 6, Simpson et al. disclose the method of claim 1, wherein generating said at least one image output comprises generating a non-compounded image (column 2, lines 26-28).

For claim 7, Simpson et al. disclose the method of claim 1, wherein generating said at least one image output comprises generating both compound and non-compound images (column 2, lines 26-28).

For claim 8, Simpson et al. disclose the method of claim 1, wherein displaying said at least one generated image output comprises displaying at least one compounded image (column 2, lines 26-28).

For claim 9, Simpson et al. disclose the method of claim 1, wherein displaying said at least one generated image output comprises displaying at least one non-compounded image (column 2, lines 26-28).

For claim 10, Simpson et al. disclose the method of claim 1, wherein displaying said at least one generated image output comprises displaying compounded and non-compounded images simultaneously (column 2, lines 26-28).

For claim 11, Simpson et al. disclose the method of claim 10, wherein at least said non-compounded images are generated in real time (column 4, lines 4-8).

For claim 12, Simpson et al. disclose the method of claim 1, wherein displaying said at least one generated image output comprises displaying compounded and non-compounded images sequentially (column 2, lines 26-28).

For claim 13, Simpson et al. disclose the method of claim 1, wherein generating said at least one image output comprises generating at least one non-compounded image from a plurality of image frames (column 2, lines 26-28).

For claim 14, Simpson et al. disclose a method for generating images comprising:

Storing (32) a plurality of frames (column 2, lines 29-33);

generating at least one of a compounded and non-compounded image output from said plurality of frames (column 2, lines 26-33); and

displaying (40) at least one of said generated compounded, non-compounded and both compound and non-compounded images (column 2, lines 26-29).

For claim 15, Simpson et al. disclose a system for generating an image using an ultrasound device (Figure 1) comprising;

a memory (32) for storing at least one frame (column 2, lines 29-33);

at least one processing device (30) adapted to process at least one of a compounded and non-compounded image (column 2, lines 26-28); and

a display device (40) adapted to display said at least one of said processed compounded and non-compounded image (column 2, lines 26-29).

For claim 16, Simpson et al. disclose the system of claim 15, where said at least one processing device (30) comprises at least a compound processing device (column 2, lines 26-28).

For claim 17, Simpson et al. disclose the system of claim 15, where said at least one processing device (30) comprises at least a non-compound processing device (column 2, lines 26-28).

For claim 18, Simpson et al. disclose the system of claim 15 comprising a switch coupled to said memory and said at least one processing device (column 2, lines 26-28; “or” operation acts as a switch).

For claim 20, Simpson et al. disclose the system of claim 15, wherein said memory may accept user input (column 3, lines 3-7).

Allowable Subject Matter

3. **Claim 19** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Other prior art cited

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Weng (US 5,396,890) discloses a three-dimensional scan converter for ultrasound imaging.

Weng et al. (US 5,782,766) disclose a method and apparatus for generating and displaying panoramic ultrasound images.

Adams et al. (US 6,464,638 B1) disclose an ultrasound imaging system and method for spatial compounding.

Dong et al. (US 6,423,004 B1) disclose a real-time ultrasound spatial compounding using multiple angles of view.

Tsujino (US 5,690,111) discloses an ultrasound diagnostic apparatus.

Saetre et al. (US 6,488,629 B1) disclose an ultrasound image acquisition with synchronized reference image.

Contact Information

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kanji Patel whose telephone number is (571) 272-7454. The examiner can normally be reached on Monday to Thursday from 8 a.m. to 6:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bella, Matthew can be reached on (571) 272-7778. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kanji Patel
Art Unit 2624
12/22/06


KANJIBHAI PATEL
PRIMARY EXAMINER